

Amendments to the Claims:

This listing of claims will replace all prior versions of claims in the application.

Listing of the Claims:

Claims 1.-30. Canceled.

31. (Currently Amended) **AThe** method according to claim ~~30~~**37**, wherein said step of determining the total amount of ~~BChE~~**butyrylcholinesterase** in the sample is carried out by a method selected from enzymatic activity analysis and monoclonal antibody binding.

32. (Currently Amended) **AThe** method according to claim ~~30~~**37**, wherein said step of determining the amount of ~~BChE~~**butyrylcholinesterase** unbound to ConA is carried out by a method selected from enzymatic activity analysis and monoclonal antibody binding.

33. (Currently Amended) **AThe** method according to claim ~~30~~**37**, wherein said biological fluid is cerebrospinal fluid, blood or blood plasma.

34. (Currently Amended) **AThe** method according to claim 33, wherein said body fluid is blood plasma, said method including the step of preparing blood plasma from the blood for analysis.

35. (Currently Amended) **AThe** method according to claim ~~30~~**37**, said method further including the steps of:

- (a) determining the total acetylcholinesterase in the sample;

(b) subjecting the sample to lectin binding analysis to determine the amount of acetylcholinesterase unbound to ConA and determining the percentage of acetylcholinesterase unbound to ConA;

(c) subjecting the sample to lectin binding analysis to determine the amount of acetylcholinesterase unbound to wheat germ agglutinin (WGA) and calculating the percentage of acetylcholinesterase unbound to WGA;

(d) determining the ratio of acetylcholinesterase unbound to ConA to acetylcholinesterase unbound to WGA wherein a ratio above about 0.95 is characteristic of Alzheimer's Disease.

36. (Currently Amended) A~~The~~ method according to Claim 35, wherein butyrylcholinesterase is removed from the sample prior to step (a).

37. (New) A method for the diagnosis of Alzheimer's disease in a patient comprising the steps of:

(1) providing a sample of an appropriate biological fluid from said patient;

(2) determining the total butyrylcholinesterase (BChE) in the sample;

(3) subjecting the sample to lectin binding analysis to determine the amount of butyrylcholinesterase unbound to concanavalin A (ConA); and

(4) determining the percentage of butyrylcholinesterase unbound to concanavalin A (ConA), wherein an increase in the percentage of butyrylcholinesterase unbound to concanavalin A as compared to normal is indicative of Alzheimer's disease in the patient.